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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,924	11/22/2000	Timothy Roy Block	ROC9-2000-0123-US1	2147

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MARTIN & ASSOCIATES, LLC
P.O. BOX 548
CARTHAGE, MO 64836-0548

EXAMINER

REILLY, SEAN M

ART UNIT PAPER NUMBER

2153

DATE MAILED: 11/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/718,924	Applicant(s) BLOCK, TIMOTHY ROY	
	Examiner Sean Reilly	Art Unit 2153	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 August 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12, 13, 15-17 and 19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12, 13, 15-17 and 19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>5/5/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This application has been assigned to another Examiner.

This Office action in response to Applicant's amendment and request for continued examination filed on 8/5/2005. Claims 1-10, 12-13, 15-17, and 19 are presented for examination. Claims 1, 6, and 9 have been amended.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 9, 12, and 19 are rejected under 35 U.S.C. 101 because they are directed to non-statutory subject matter. Note that these claims permit the claimed "program product comprising a computer program" to be a signal on a carrier wave (as claimed, a "signal bearing media" that comprises a "transmission type media" – see the specification pg 13, lines 14-21). A signal does not fall into one of the four statutory categories of a process, machine, manufacture, or composition of matter. Therefore, claims 9, 12, and 19 are non-statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-10, 12-13, 15-17, and 19 are rejected under 35 U.S.C. 102(e) as being unpatentable over Hamilton et al. (U.S. Patent No. 6,392,993, hereinafter "Hamilton").

In considering claim 1, Hamilton discloses an apparatus comprising:

At least one processor (inherent), a memory coupled to the at least one processor (inherent), and a network interface (inherent) that couples the apparatus to a plurality of other computer systems (col. 27, line 33-40, "sending system 196"), wherein the apparatus and the plurality of other computer systems form a cluster of computers that cooperate via ordered messages to perform a task (col. 5, lines 55-60, "the invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network"; col. 27, lines 53-54, describing that each message (the messages in Hamilton are actually portions of messages, called "packets") has "sequence numbers"); and

A cluster communication mechanism residing in the memory and executed by the at least one processor (inherent to allow the master to communicate with the other computer systems in the group), the cluster communication mechanism including a sliding send window that communicates at least one ordered message to a plurality of the other computer systems without waiting for an acknowledge message from any of the plurality of other computer systems before sending out the next ordered message (col. 27, lines 51-65, describing that a group of messages within a window size are sent to the

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recipients before an acknowledgment for the group is received) and wherein the cluster communication mechanism enforces execution of a plurality of received messages in the order the plurality of received messages were received (i.e. in reliability mode the system doesn't wait for any acknowledgments, but just processes the messages as they are received) (Col 27, lines 33-65).

In considering claim 2, Hamilton further discloses that each ordered message includes a header with information ("ACK request flag") that indicates whether an acknowledge message for the ordered messages may be delayed and grouped with at least one subsequent acknowledge message (col. 27, lines 54-65, "ACK request flag is set on every Nth packet... [which] lets sending system 196 know with certainty that all of the packets of the ACK window were received").

In considering claim 3, Hamilton further discloses that the acknowledge message acknowledges from one to a plurality of ordered messages ("N" can be set to any number).

In considering claim 4, Hamilton discloses a networked computer system comprising:

A cluster of computer systems that cooperate via ordered messages to perform a task (col. 5, lines 55-60; col. 27, lines 53-54), wherein each computer system includes:

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A network interface that couples each computer system via a network to other computer systems in the cluster, and a memory (all inherent in the receiving systems); and

A cluster communication mechanism residing in the memory, the cluster communication mechanism enforcing execution of a plurality of received messages in the order the plurality of received messages were received (i.e. in reliability mode the system doesn't wait for any acknowledgments, but just processes the messages as they are received) (Col 27, lines 33-65), the cluster communication mechanism including a sliding send window that communicates at least one ordered message to a plurality of other computer systems without waiting for an acknowledgment from any of the plurality of other computer systems before sending out the next ordered message (col. 27, lines 51-65, describing that a group of messages within a window size are sent to the recipients before an acknowledgment for the group is received).

In considering claim 5, Hamilton further discloses that each ordered message includes a header with information ("ACK request flag") that indicates whether an acknowledge message for the ordered messages may be delayed and grouped with at least one subsequent acknowledge message (col. 27, lines 54-65, "ACK request flag is set on every Nth packet... [which] lets sending system 196 know with certainty that all of the packets of the ACK window were received").

In considering claim 6, Hamilton discloses a computer-implemented method for processing a task in a clustered computing environment, the method comprising the steps of:

Providing a cluster communication mechanism executing on a first computer system in a cluster wherein the computers in the cluster cooperate via ordered messages to perform the task and wherein the cluster communications mechanism includes a sliding send window that communicates at least one ordered message to a plurality of other computer systems in the cluster without waiting for an acknowledgment from each computer system in the cluster that received an ordered message before sending out the next ordered message (col. 5, lines 55-60, “the invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network”; col. 27, lines 53-54, describing that each message (the messages in Hamilton are actually portions of messages, called “packets”) has “sequence numbers”) and wherein the cluster communication mechanism enforces execution of a plurality of received messages in the order the plurality of received messages were received (i.e. in reliability mode the system doesn’t wait for any acknowledgments, but just processes the messages as they are received) (Col 27, lines 33-65);

The cluster communication mechanism sending a first ordered message to a first plurality of other computer systems in the cluster; and

The cluster communication mechanism sending a second ordered message to a second plurality of other computer systems in the cluster without waiting for a response to the first ordered messages from each of the first plurality of other computer systems in

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the cluster (col. 27, lines 51-65, describing that a group of messages within a window size are sent to the recipients before an acknowledgment for the group is received) (i.e. in reliability mode the system doesn't wait for any acknowledgments, but just processes the messages as they are received) (Col 27, lines 33-65).

In considering claim 7, Hamilton further discloses that at least one of the first plurality of other computer system in the cluster responds to the first and second ordered messages by sending a single acknowledge message to the cluster communication mechanism that acknowledges both the first and second ordered messages (col. 27, lines 54-65, "ACK request flag is set on every Nth packet... [which] lets sending system 196 know with certainty that all of the packets of the ACK window were received").

In considering claim 8, Hamilton further discloses that the first and second ordered messages each include a header with information (i.e. no "ACK request flag") that indicates whether an acknowledge messages for the first and second ordered messages may be delayed and grouped with at least one subsequent acknowledge message (col. 27, lines 54-65, "ACK request flag is set on every Nth packet... [which] lets sending system 196 know with certainty that all of the packets of the ACK window were received").

In considering claim 9, Hamilton discloses a program product comprising a computer program comprising:

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A cluster communication mechanism that includes a sliding send window that communicates at least one ordered message to a plurality of other computer systems in a cluster system that cooperate via ordered messages to perform a task without waiting for an acknowledge message from any of the plurality of other computer systems before sending out the next ordered message (col. 5, lines 55-60, “the invention may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a communications network”; col. 27, lines 53-54, describing that each message (the messages in Hamilton are actually portions of messages, called “packets”) has “sequence numbers”; col. 27, lines 54-65, “ACK request flag is set on every Nth packet... [which] lets sending system 196 know with certainty that all of the packets of the ACK window were received”) and wherein the cluster communication mechanism enforces execution of a plurality of received messages in the order the plurality of received messages were received (i.e. in reliability mode the system doesn’t wait for any acknowledgments, but just processes the messages as they are received) (Col 27, lines 33-65); and

Computer-readable signal bearing media bearing the computer program
(inherent).

In considering claim 10, Hamilton further discloses that the signal bearing media comprises recordable media (inherent).

In considering claim 11, Hamilton further discloses that the signal bearing media comprises transmission media (inherent).

In considering claim 12, Hamilton further discloses that the first and second ordered messages each include a header with information (i.e. no “ACK request flag”) that indicates whether an acknowledge messages for the first and second ordered messages may be delayed and grouped with at least one subsequent acknowledge message (col. 27, lines 54-65, “ACK request flag is set on every Nth packet... [which] lets sending system 196 know with certainty that all of the packets of the ACK window were received”).

In considering claims 13, 17, and 19, Hamilton further discloses that the ordered message is communicated to the plurality of other computer systems via IP multicast (“IP multicast,” col. 12, lines 41-42).

In considering claims 14, 18, and 20, Hamilton further discloses that the communication mechanism enforces execution of a plurality of received messages in the order the plurality of received messages were received (i.e. it doesn’t wait for any acknowledgments, but just processes the messages as they are received).

In considering claim 15, Hamilton further discloses that the first plurality of computers includes all computers systems in the second plurality of computers systems (the multicast messages are sent to the same multicast group of recipients).

In considering claim 16, Hamilton further discloses that the first plurality of computer systems comprises the second plurality of computer systems (the multicast messages are sent to the same multicast group of recipients).

Response to Arguments

In response to Applicant's request for reconsideration filed on 8/5/2005, the following factual arguments are noted:

- a. Claims 9, 12, and 19 as amended recite statutory subject matter under 35 U.S.C. 101.
- b. Hamilton does not disclose sending ordered messages in a clustered computing environment.
- c. Hamilton does not disclose enforcing the execution of a plurality of messages in the order they were received.

In considering (a), Examiner respectfully disagrees with Applicant's argument. A signal does not fall into one of the four statutory categories of a process, machine, manufacture, or composition of matter. Applicant must limit the claims to signal bearing media comprising "recordable type media" as defined in Applicant's specification on pg 13. "Transmission type media" as defined by Applicant is non-statutory. Applicant's attention is drawn to the recently published "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility (signed 206Oct2005)," pages 50-57.

[http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.p](http://www.uspto.gov/web/offices/pac/dapp/opla/preognotice/guidelines101_20051026.pdf)

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In considering (b), Examiner respectfully disagrees with Applicant's argument. Hamilton clearly disclosed using the messaging system within a clustered computing environment (see Hamilton Col 5, lines 55-58 "distributed computing environments where tasks are performed by remote processing devices that are linked through communication network.") Any contention by Applicant otherwise is in direct contradiction to the explicit statements found in Hamilton's disclosure. Applicant should note that Examiner rejected Applicant's claims under 35 U.S.C. 102 and Examiner does not attempt to modify the system disclosed by Hamilton, since no modification is needed to meet Applicant's current claim limitations.

In considering (c), Examiner respectfully disagrees with Applicant's argument. Hamilton clearly disclosed enforcing the execution of a plurality of messages in the order they were received. For instance in reliability mode the sending system doesn't wait for any acknowledgments, and just processes and transmits the messages as they are received (Col 27, lines 33-65). It is worthy of note that the term "execution" in this context is broad and certainly does not imply executing an executable task contained within a received message, as Applicant appears to assert (Applicant response pg 10). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

12. The prior art made of record, in PTO-892 form, and not relied upon is considered pertinent to applicant's disclosure.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

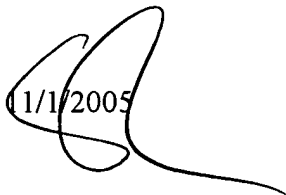
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sean Reilly whose telephone number is 571-272-4228. The examiner can normally be reached on M-F 8-5.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



11/1/2005



GLENTON B. BURGESS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100